

REMARKS

Reconsideration and allowance of the application are respectfully requested in light of the forgoing amendments and the following remarks. Applicant has carefully studied the non-final Office Action mailed August 25, 2005. The amendments appearing above and these explanatory remarks are believed to be fully responsive to the Action. Accordingly, the patent application is now believed to be in condition for allowance.

Applicant responds to the outstanding Action by centered headings that correspond to the centered headings employed by the Office, to ensure full response on the merits to each finding of the Office.

Claims 1-24 remain in this application. Claims 1, 7, 17, 18, 19 and 20 are herein amended. Claims 1, 17, 18 and 19 have been amended to make more explicit what was stated in the claims. In particular, the claims, where they once referred to "A screen reader software product comprising a reader module ...", now state "A screen reader software product comprising a screen reader module ..." Additionally, claims 1, 7, 17, 18, 19 and 20 have been amended to correct for typographical errors, including an error in the dependency of claim 7. Support for these amendments can be found throughout the specification including at paragraph 0039. New claims 22-24 have been added. Support for claim 22 can be found throughout the specification including at paragraph 0008. Claims 23 and 24 refer to the stylistic representation of the data, as opposed to the content itself or the contextual associations therewith. Support for claims 23 and 24 can be found throughout the specification including at paragraphs 0057 and 0060. No new matter has been added.

*Claim Objections*

Claim 18 has been objected to because the phrase "as an end-user-definable a pre-selected" in lines 18-19 is alleged to be unclear. Claim 18 has been amended to remove the aforementioned informality. It is therefore respectfully requested that the objection to claim 18 be withdrawn.

***35 USC §112, second paragraph***

Claims 1-21 stand rejected under 35 U.S.C. 112, second paragraph as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims at issue are alleged to be indefinite because they fail to point out what is included or excluded by the claim language. Specifically, the Office has stated, “[c]laims 1, 5, and 14- 19 contain the term “substantially” making the claims unclear.”

Claim 1, in relevant part, states, “[T]he schema module adapted to send non-textual display information with associated textual display information to the output device in substantially concurrent fashion.” Thus, the essence of the Office’s argument is that one could not figure out what is included or excluded by the complained of phraseology due to the use of the word “substantially” within the phrase. In addressing the use of the term “substantially”, MPEP 2173.05(b) states:

The term “substantially” is often used in conjunction with another term to describe a particular characteristic of the claimed invention. It is a broad term. *In re Nehrenberg*, 280 F.2d 161, 126 USPQ 383 (CCPA 1960). The court held that the limitation “to substantially increase the efficiency of the compound as a copper extractant” was definite in view of the general guidelines contained in the specification. *In re Mattison*, 509 F.2d 563, 184 USPQ 484 (CCPA 1975). The court held that the limitation “which produces substantially equal E and H plane illumination patterns” was definite because one of ordinary skill in the art would know what was meant by “substantially equal.” *Andrew Corp. v. Gabriel Electronics*, 847 F.2d 819, 6 USPQ2d 2010 (Fed. Cir. 1988).

Thus, the relevant inquiry is whether one of ordinary skill in the art would know what is meant by the term “substantially” especially in the context of the phrase “substantially concurrent.” It is submitted that one of ordinary skill in the art would know what is meant by the term “substantially concurrent.”

Attached Exhibit 1 is a copy of a search made by the undersigned of the US Patent Office database in which presumptively valid US patents with the phrase “substantially” was queried. Exhibit 2 is a copy of a search of the US Patent Office database in which presumptively valid US patents with the phrase “substantially concurrent” was queried. As is seen from the exhibits, in excess of 800,000 presumptively valid US patents have issued since 1976 that contain the complained of word “substantially.” Most critically, 192 presumptively valid US patents have issued since 1976 that contain the exact phrase “substantially concurrent.” It is respectfully

submitted that the phraseology of issued patent claims is *prima facie* evidence of language that is not indefinite, and as such, this basis for rejection should be withdrawn.

Claim 7 stands rejected under 35 USC 112, second paragraph as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 7 recited the limitation "the pre-selected sound" in line 1, for which no antecedent basis for this limitation appears in the claim, nor did the claims upon which claim 7 depend provide the necessary antecedent basis. Claim 7 has been amended to be dependent upon claim 6, rather than claim 5. Claim 6 provides the necessary antecedent basis for the limitation "the pre-selected sound" as recited in the claim. It is therefore respectfully requested that the rejection of claim 7 under 35 USC 112, second paragraph be withdrawn.

*Claim Rejection(s) – 35 U.S.C. §102*

Claims 1-9 and 17-21 stand rejected under 35 U.S.C. 102(b) as allegedly being anticipated by Raman et al. ("Raman", US 5,572,625). The Applicants respectfully traverse this rejection on the grounds that a *prima facie* case of anticipation has not been made, nor are the claims anticipated by Raman.

It is well-settled that "[a]nticipation requires the disclosure in a single prior art reference of each element of the claim under consideration" <sup>1,2</sup> Furthermore, to find anticipation the identical invention must be shown in as complete detail as is contained in the claim with the elements arranged as required by the claim.<sup>3</sup>

Claim 1, as originally presented, was directed to "[a] screen reader software product comprising: a reader module communicatively coupled with resident software

<sup>1</sup> *W.L. Gore and Assoc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303, 313 (Fed. Cir. 1983) (citing *Soundscriber Corp. v. United States*, 360 F.2d 954, 960, 148 USPQ 298, 301 (Ct. Cl.), *adopted*, 149 USPQ 640 (Ct. Cl. 1966)), *cert. denied*, 469 U.S. 851 (1984); See also *Carcilla v. Starlight Archery*, 804 F.2d 135, 138, 231 USPQ 644, 646 (Fed. Cir.), modified on reh'g., 1 USPQ 2d 1209 (Fed. Cir. 1986). *RCA Corp. v. Applied Digital Data Sys., Inc.*, 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984).

<sup>2</sup> See also MPEP 2131 providing "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). ...The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an *ipsissimis verbis* test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

on a computer, the reader module adapted to collect textual and non-textual display information generated by the resident software; a broadcast module communicatively coupled to the reader module, the broadcast module adapted to communicate the display information collected by the reader module to an output device; a schema module communicatively coupled to the broadcast module, the schema module adapted to send non-textual display information with associated textual display information to the output device in substantially concurrent fashion." Thus, the invention is directed to a screen reader software product. A necessary element in each of the independent claims is that the software product includes a reader module. That reader module is communicatively coupled with resident software on a computer, the reader module being adapted to collect textual and non-textual display information generated by the resident software. As indicated above, the reader module referred to in the claim is a screen reader module. The claim has been amended to make this even more explicit. Raman does not teach a software product having the necessary element of a reader module, or screen reader module, nor is the methodology taught by Raman implementable within such a system.

The phrase "screen reader" is a term of art. Some have defined this as a "text-to-speech system, intended for use by blind or low-vision users, that speaks [or otherwise displays] the text content *of a computer display*." (emphasis added)<sup>4,5,6</sup> Thus, a screen reader is concerned with the text content, or a specific portion of the text content, as displayed on a computer screen. On the first page of the specification it was stated:

Typically, visual information is displayed upon a monitor screen and data can be added or manipulated via keystrokes upon an associated keyboard. Feedback is provided visually to the user by the monitor screen. Blind users cannot utilize the information appearing upon the monitor screen while visually impaired users may experience difficulty doing so. Accordingly, screen readers have been developed to assist blind and visually impaired users when they use a personal computer.

<sup>3</sup> Id.

<sup>4</sup> The Free On-line Dictionary of Computing, © 1993-2005 Denis Howe, accessed on the internet via Dictionary.com on Thursday, November 03, 2005.

<sup>5</sup> See also <http://www.umuc.edu/ade/glossary.html> - "A screen reader is a software program that uses a synthetic voice to read a computer screen out loud. Computer users who are visually impaired or blind often use screen readers to navigate the Web. Two popular screen reader programs are JAWS for Windows and Window-Eyes."

Screen readers therefore are systems that output the contents of the computer screen, or a defined portion thereof, to a user, typically one who is blind or vision-impaired, regardless of the nature of the underlying application. Additionally, they create an interface that allows a user to modify that text. They do not require that application or other document to be converted to a different format to be output. Additionally, it is only that which appears on the screen, or a relevant portion thereof, that is output, not the entire document or application.

The Office on page 3 asserts, “[a]s per claim 1, Raman teaches a screen reader software product comprising: a reader module communicatively coupled with resident software on a computer, the reader module adapted to collect textual and non-textual display information generated by the resident software (col. 4, lines 21-38)...”

Reference is made to the Raman patent at column 4, lines 21-38 which states that:

Referring now to FIG. 1, there is shown a flow chart of the method of the present invention. A digitized source document 10 is marked up by a markup language such as TeX.RTM.. A recognizer 12 consisting essentially of a lexical analyzer and a recursive descent parser is provided. The operation of the recognizer 12 is described in detail hereinbelow. Recognizer 12 transforms source document 10 into a structured internal representation 14 structured essentially as a hierarchical tree. A set of audio rendering rules 16 are provided which operate upon the structured internal representation 14 by means of a audio formatter 22 to producing audio output 18. Both rendering rules 16 and the process whereby they act upon structured internal representation 14, are described in detail hereinbelow. An audio formatting language (AFL) 20 is provided to allow manipulation of rendering rules 16, thereby providing user control over audio output 18. AFL 20 is also described in detail hereinbelow.

It becomes readily apparent from reading this description that Raman does not teach a screen reader software product with a reader module. The Raman method involves the conversion of a source document by a markup language using the recognizer to form a structured internal representation of the source document, which is then output in audio format. Raman describes his method as “acoustical typesetting” of the document through the conversion process.<sup>7</sup> The vision-impaired user of such a system is not experiencing that which a corresponding user experiences when viewing a screen, but rather is confronted with an entire stream of the document. The ability of the Raman system to present the audio output to a user is intricately linked to the ability of the recognizer to

<sup>6</sup> See also <http://www.buffalostate.edu/offices/disabilityservices/glossary.htm> defining screen reader as “a software/hardware system that allows a person with a visual or print impairment to attain access to printed material on a computer screen. Output for the user can be both tactile and/or auditory.”

<sup>7</sup> See column 4, line 16.

create the structured internal representation of the digitized source document, whereas a screen reader is manipulating the flow of data as it is output to the screen. The Raman methodology is much different than the implementation of a screen reader and does not create the interface that one would have with a screen reader.

For these reasons Raman does not anticipate the present claims because the Raman disclosure does not teach each element of the claims at issue. It is therefore respectfully requested that the rejection of claims 1-9 and 17-21 under 35 U.S.C. 102(b) be withdrawn.

*Claim Rejections – 35 USC § 103*

Claims 10-13 and 15 stand rejected under 35 USC § 103(a) as allegedly being unpatentable over Raman et al. ("Raman", US 5,572,625) in view of Giuliani et al. ("Giuliani", US 2002/0 105496). Raman has been discussed above in reference to the rejection of claims 1-9 and 17-21 under 35 USC 102(b). The reference to Raman fails to anticipate the subject matter of claim 1, upon which claims 10-13 and 15 are dependent. Having removed the Raman reference, the claimed invention is clearly neither taught nor suggested by Giuliani, nor does Giuliani provide the elements missing in the Raman reference. It is therefore respectfully requested that the rejection of claims 10-13 and 15 under 35 USC § 103(a) over Raman in view of Giuliani be withdrawn.

Claim 14 stands rejected under 35 USC § 103(a) as allegedly being unpatentable over Raman et al. ("Raman", US 5,572,625) in view of Burchart ("Burchart", US 4,836,784). Raman has been discussed above in reference to the rejection of claims 1-9 and 17-21 under 35 USC 102(b). The reference to Raman fails to anticipate the subject matter of claim 1, upon which claim 14 is dependent. Having removed the Raman reference, the claimed invention is clearly neither taught nor suggested by Burchart, nor does Burchart provide the elements missing in the Raman reference. It is therefore respectfully requested that the rejection of claim 14 under 35 USC § 103(a) over Raman in view of Burchart be withdrawn.

Claim 16 stands rejected under 35 USC § 103(a) as allegedly being unpatentable over Raman et al. ("Raman", US 5,572,625) in view of Rohen ("Rohen", US 5,186,629). Raman has been discussed above in reference to the rejection of claims 1-9 and 17-21

under 35 USC 102(b). The reference to Raman fails to anticipate the subject matter of claim 1, upon which claim 16 is dependent. Having removed the Raman reference, the claimed invention is clearly neither taught nor suggested by Rohen, nor does Rohen provide the elements missing in the Raman reference. It is therefore respectfully requested that the rejection of claim 16 under 35 USC § 103(a) over Raman in view of Rohen be withdrawn.

A *prima facie* case of obviousness has not been made by the Office. MPEP 2142 addresses the requirements to establish a *prima facie* case of obviousness.<sup>8</sup> Three basic criteria must be met. First, there must be some suggestion or motivation to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. The failure of the combined references to teach all of the claim limitations has been addressed above. Additionally, it is noted that the Office Action is silent as to the expectation of success. Thus, two of the three elements are not met. This leaves the issue of suggestion or motivation to combine references.

It is well-established that "[o]bviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination."<sup>9,10</sup> The Office does not address the

<sup>8</sup> To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP § 2143 - § 2143.03 for decisions pertinent to each of these criteria.

<sup>9</sup> *In re Geiger*, 815 F.2d 686, 2 USPQ 2d 1276 (Fed. Cir. 1987).

<sup>10</sup> Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." *In re Kutzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also *In re Lee*, 277 F.3d 1338, 1342-44, 61 USPQ2d 1430, 1433-34 (Fed. Cir. 2002)

motivation to *combine* references to arrive at the claimed invention, but merely seems to indicate that the references could be combined. For instance, in discussing the rejection of claims 10-13 and 15 over Raman in view of Giuliani, the Office states “[i]t would have been obvious to one of ordinary skill in the art at the time of the invention to include Giuliani’s teaching with Raman’s product in order to allow the blind the opportunity to read and determine the attributes associated with text.” Yet, ostensibly, the system taught by Raman allows the blind the opportunity to read and determine the attributes associated with text. So, why would one be motivated to add the teachings of Giuliani to a system that already performs the desired functionality? There is simply no teaching, suggestion or motivation to make the combination, as asserted by the Office, found either explicitly or implicitly in the references. It is therefore respectfully requested that the rejection of claims 10-16 under 35 U.S.C. § 103(a) be withdrawn.

***Conclusion***

The application is believed to be in condition for allowance, and prompt, favorable action thereon is earnestly solicited. Should Examiner Muhebbullah feel that any other point requires consideration, then she is cordially invited to contact the undersigned at (727) 507-8558.

Very respectfully,

SMITH & HOPEN

Dated: December 22, 2005

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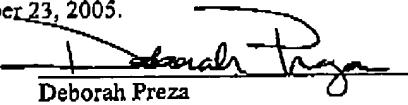
(discussing the importance of relying on objective evidence and making specific factual findings with respect to the motivation to combine references); *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

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**CERTIFICATE OF FACSIMILE TRANSMISSION**  
(37 C.F.R.8(a))

I HEREBY CERTIFY that this Amendment A including Amendments to the Claims and Remarks, is being transmitted by facsimile to the United States Patent and Trademark Office, Attn.: Sajeda Muhebbullah, Art Unit 2174, (571) 273-8300 on December 23, 2005.

Date: December 23, 2005

  
Deborah Preza